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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/417,705	10/13/1999	JUNYA KAKU	991142	7820

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WASHINGTON, DC 20006

EXAMINER

NGUYEN, LUONG TRUNG

ART UNIT	PAPER NUMBER
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2612

DATE MAILED: 08/03/2004

14

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/417,705

Applicant(s)

KAKU, JUNYA

Examiner

LUONG T NGUYEN

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 23 June 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 10-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 10-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>g</u> . | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 6/23/2004 has been entered.

### ***Response to Arguments***

2. Applicant's arguments with respect to newly added claims 10-14 filed on 6/23/2004 have been considered but are moot in view of the new ground(s) of rejection.

### ***Claim Objections***

3. Claims 10-14 are objected to because of the following informalities:

Claim 10 (line 5), "the memory area" should be changed to --a memory area--.

It should be noted that, the specification, page 3, lines 11-12, disclose "the second predetermined period is  $1/N$ th (N is an integer equal to or greater than 2) of the first period. Therefore, in claim 10 (line 9), "one for an integer" should be changed to --one over an integer--.

Claims 11-14 are objected as being dependent on claim 10.

Appropriate correction is required.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 10-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hayashi (US 5,734,427) in view of Hirabyashi et al. (US 6,295,596) further in view of Kanai et al. (US 5,835,164).

Regarding claims 10, 13, Hayashi discloses a digital camera, comprising a creator for creating an image signal corresponding to an optical image of an object scene (combination of CCD image sensor 12, preprocessing 14, ADC 16, movie processing circuit 20, figure 1, column 2, line 52-column 3, line 15); a memory (memory 240, figures 2A-2B, column 5, lines 35-50); a writer for writing the second image signal created by said creator to one of said plurality of memory areas (write control signal, column 5, lines 35-50); and a reader for reading the image signal from another of said plurality of memory areas (read control signal, column 5, lines 35-50); a displayer for displaying an image based on the image signal read out by said reader (monitor 29, figure 1, column 2, lines 52-56).

Hayashi fails to specifically disclose a memory having a plurality of memory areas; a changer for changing a selecting a memory area at an interval of the first period; a writer for writing the second image signal created by said creator to one of said plurality of memory areas based on a changing result of said changer; and a reader for reading the image signal from another of said plurality of memory areas based on the changing result of said changer every

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second period. However, Hirabayashi et al. disclose memory 11 (SDRAM) has two banks A and B, the data can be written and read out, independently of each other, these banks can be switched (figure 1, column 4, line 63 – column 5, line 3). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device in Hayashi by the teaching of Hirabayashi et al. in order to obtain a device in which data can be read out fast by switching the banks (column 6, lines 29-30).

Hayashi and Hirabayashi et al. fail to specifically disclose creating an image signal of an object scene every first period, and reading the from another of the plurality of memory areas every second period which is one over an integer of the first period. However, Kanai et al. teach a video signal processor, which comprises a memory, in which the digital data being written into the memory at a first rate based on a writing control clock and being read from the memory at a second rate, which is  $n$  times the first rate,  $n$  is an integer greater than one (see abstract, column 57, lines 29-38). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device in Hayashi and Hirabayashi et al. by the teaching of Kanai et al. in order to reduce flicker (see abstract).

Regarding claim 11, Hayashi discloses an imaging device (CCD image sensor 12, figure 1, column 2, line 52 - column 3, line 15), a processor (preprocessing 14, ADC 16, movie processing circuit 20, figure 1, column 2, line 52-column 3, line 15).

Regarding claim 12, Hayashi discloses the imaging surface has a first resolution (CCD image sensor 12, figure 1, column 2, lines 60-67), and the image signal has a second resolution

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lower than the first resolution (image signal output from movie processing circuit has lower resolution, figures 1, column 2, lines 52-56).

Regarding claim 14, Hirabayashi et al. disclose the changer changes the selecting of the memory area in a predetermined order (column 6, line 64 – column 7, line 40).

### ***Conclusion***

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to LUONG T NGUYEN whose telephone number is (703) 308-9297. The examiner can normally be reached on 7:30AM - 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wendy Garber can be reached on (703) 305-4929. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

LN LN  
7/21/04

  
TUAN HO  
PRIMARY EXAMINER